

**SYNONYMY IN THE TREEHOPPER GENERA *HOPLOPHORION*,
METCALFIELLA, AND *OCHROPEPLA* (HOMOPTERA: MEMBRACIDAE)**

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Abstract.—The nomenclatorial status of the Neotropical treehopper genera *Hoplophorion* Kirkaldy, 1901, *Metcalfiella* Goding, 1929, and *Ochropepla* Stål, 1869, and of the tribe Hoplophorionini Goding, 1926, is reviewed. *Hoplophorion* is considered a **junior synonym** of *Ochropepla*; *Metcalfiella* is **reinstated** as a valid genus. The type species and three other species of *Hoplophorion* are placed in *Ochropepla*, producing one **new combination**, *Ochropepla triangulum* (Germar); most of the other species recently placed in *Hoplophorion* are referred to *Metcalfiella*. The nominal species (and subspecies) of *Ochropepla* (8) and *Metcalfiella* (25) are listed.

Key Words: Neotropical, Hexapoda, Insecta, Membracinae, Hoplophorionini, *Hoplophora*, nomenclature

Funkhouser (1951) noted that the treehopper genus *Metcalfiella* "has had a checkered nomenclatorial career of misadventure." Indeed, revisionary work at the species level disclosed the need to review the status of the genera *Metcalfiella* Goding, 1929 (type species: *Hoplophora pertusa* Germar, 1835, by original designation), *Ochropepla* Stål, 1869 (type species: *Hoplophora corrosa* Fairmaire, 1846, by subsequent designation), and *Hoplophorion* Kirkaldy, 1901, a replacement name for *Hoplophora* Germar, 1833 (preoccupied by *Hoplophora* Perty, 1833) (type species: *Membracis triangulum* Germar, 1821, by subsequent designation), as well as the availability of the family-group name Hoplophorionini, of the subfamily Membracinae (Deitz 1975).

STATUS OF GENUS-GROUP NAMES

The generic name *Metcalfiella*, first published (Goding 1929a) with no description or indication (Article 12, International Commission on Zoological Nomenclature 1985), became available when Goding (1929b) designated a type species. Goding (1929a, c) considered *Hoplophorion triangulum* to be congeneric with *Ochropepla corrosa* and clearly intended (1929a) to propose *Metcalfiella* as a new genus for the other species previously placed in *Hoplophorion*. Although initially (1929a) ambiguous, Goding later (1929c) gave nomenclatorial priority to *Hoplophorion* (1901) over *Ochropepla* (1869) (perhaps because *Hoplophorion* replaced the older name *Hoplophora* [1833]). In view of the current rules of zoological nomenclature, *Ochropepla* has priority.

Although Funkhouser (1951:68, footnote) stated that he agreed with Goding, Funkhouser's arrangement of the relevant

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type species contradicted this statement—*M. triangulum* was not placed as congeneric with *H. corrosa*, but rather with *H. pertusa*. Furthermore, given his arrangement, Funkhouser erred in listing *Hoplophorion* (1901) as a junior synonym of *Metcalfiella* (1929). Metcalf and Wade (1965) corrected this priority error, listing *Hoplophorion* as the senior synonym of *Metcalfiella*, but did not question the generic synonymy. Consequently, *Ochropepla* and *Hoplophorion* were considered valid in Metcalf and Wade's (1965) catalog, and accepted by most later workers (see Wood and Morris 1974, Deitz 1975, Ceballos-Bendezú 1980, Wood 1984), bringing the nomenclature back to its pre-Goding condition.

Our concept of *H. corrosa* Fairmaire, the type species of *Ochropepla*, is based on the original description and on a female specimen in the Signoret collection (Naturhistorisches Museum Wien, Vienna, Austria) with labels "Bogota|Coll. Signoret.," "corrosa|det. Signoret.," "corrosa|det. Fowler.," "Coll. Nat.-Mus. Wien.," "Hoplophora," and "POSSIBLE|LECTO-TYPE|Hoplophora corrosa|Fairmaire|see Fowler 1894c|det. McKamey & Deitz 1990" (the last a red-bordered label). This female (from Bogotá, the type locality; in the Signoret collection, one of two repositories listed by Fairmaire; and examined by Fowler) is likely to be the specimen that Fowler (1894) referred to as "the type-specimen of *O. corrosa*," thus fixing it as the lectotype (Article 74a, International Commission on Zoological Nomenclature 1985).

The type series of *M. triangulum* could not be located. Nevertheless, our analysis of the original description in conjunction with species-level revisions of *Ochropepla* and *Metcalfiella* confirmed that *M. triangulum* is, as Goding (1929a) believed, congeneric with *H. corrosa*. This decision will be justified in a forthcoming revision of *Ochropepla*. Thus, after correcting Goding's priority decision, the genera here considered valid are *Ochropepla* (with *Hoplophorion* as its junior synonym) and *Metcalfiella*.

The pronota of *Ochropepla* (Figs. 1, 2) and *Metcalfiella* (Figs. 5, 6) are similar (short in length, conspicuously punctate, and without horn-like projections), but these genera are apparently distant relatives within the tribe Hoplophorionini (McKamey 1989). Whereas *Ochropepla* has an r-m crossvein in the hind wing (Fig. 3), *Metcalfiella* has the veins R_{4+5} and M_{1+2} confluent distally (Fig. 7). Furthermore, *Metcalfiella* is unique among membracids in that the pronotum has many more pale setae than pits (Fig. 4), rather than just one seta per pit.

STATUS OF FAMILY-GROUP NAME HOPLOPHORIONINI GODING, 1926

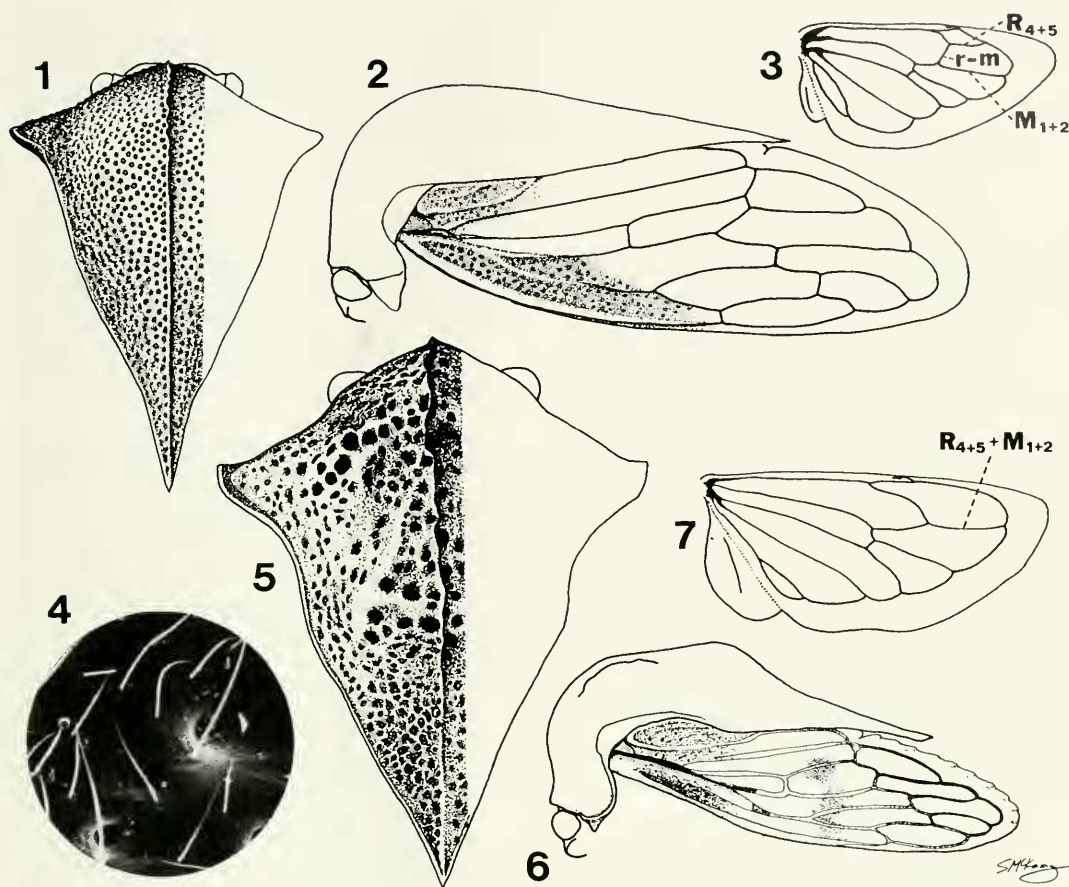
The family-group name Hoplophorionini is retained in accordance with Article 40a (International Commission on Zoological Nomenclature 1985), although *Hoplophorion*, the nominotypical genus of the tribe, is here considered a junior synonym of *Ochropepla*. Goding (1926) proposed the name Hoplophorionini (as Hoplophorioninae) to replace Hoplophorinae Amyot and Serville, 1843, which was based upon the junior homonym *Hoplophora* Germar.

LISTS OF NOMINAL SPECIES IN *METCALFIELLA* AND *OCHROPEPLA*

The following placements, including one new combination, are based on examination of type material (indicated by an asterisk*) or of original descriptions of the relevant nominal species. Forthcoming revisions of *Metcalfiella* and *Ochropepla* will include lists of type material examined, species synonymies, new species, and institutional locations for specimens of each species.

Metcalfiella (all species names represent transfers from *Hoplophorion*, *sensu* Metcalf and Wade 1965):

1. *Hoplophora apiformis* Buckton, 1902
2. *Hoplophorion carinulatum* Schmidt, 1906
3. *Hoplophora cinerea* Fairmaire, 1846



Figs. 1-7. Comparison of *Ochropepla* and *Metcalfiella*. 1, 2, *Ochropepla corrosa* (Fairmaire), female, head and pronotum. 1, dorsal view. 2, lateral view (including forewing). 3, *Ochropepla* sp., right hind wing. 4, *Metcalfiella* sp., electron micrograph of pronotal setation (courtesy of C. H. Dietrich). 5, 6, *Metcalfiella pertusa* (Germar), female, head and pronotum. 5, dorsal view. 6, lateral view (including forewing). 7, *Metcalfiella* sp., right hind wing.

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| 4. * <i>Hoplophora cinerea obfuscata</i> Fowler, 1894 | 14. <i>Hoplophorion ohausianum</i> Schmidt, 1906 |
| 5. * <i>Hoplophora cribrum</i> Fairmaire, 1846 | 15. * <i>Hoplophora pertusa</i> Germar, 1835 |
| 6. * <i>Hoplophora disparipes</i> Fowler, 1894 | 16. * <i>Hoplophora porosa</i> Walker, 1851 |
| 7. <i>Hoplophorion erectum</i> Schmidt, 1906 | 17. * <i>Hoplophora proxima</i> Walker, 1851 |
| 8. <i>Hoplophorion erectum nigromaculatum</i> Schmidt, 1906 | 18. * <i>Hoplophora pubescens</i> Buckton, 1902 |
| 9. * <i>Hoplophora fimbriata</i> Stål, 1862 | 19. * <i>Hoplophora rubripes</i> Funkhouser, 1922 |
| 10. * <i>Hoplophora gigantea</i> Fairmaire, 1846 | 20. <i>Hoplophora sanguinosa</i> Fairmaire, 1846 |
| 11. <i>Hoplophora haenschi</i> Schmidt, 1906 | 21. * <i>Hoplophora semitecta</i> Walker, 1858 |
| 12. <i>Hoplophora monogramma</i> Germar, 1835 | 22. * <i>Hoplophora signoreti</i> Fowler, 1894 |
| 13. * <i>Hoplophora obtusa</i> Stål, 1862 | 23. * <i>Hoplophora unicolor</i> Fowler, 1894 |

24. **Hoplophora variegata* Fairmaire, 1846
 25. **Hoplophora vicina* Fairmaire, 1846
Ochropepla (species names 1, 4, 5, and 8 represent transfers from *Hoplophorion*, *sensu* Metcalf and Wade 1965):

1. **Hoplophora concinna* Fowler, 1894
2. **Hoplophora concolor* Walker, 1851
3. **Hoplophora corrosa* Fairmaire, 1846
4. **Triquetra hebes* Walker, 1851
5. **Ochropepla inaequalis* Fowler, 1894
6. **Ochropepla pallens* Stål, 1869
7. **Hoplophora punctum* Fairmaire, 1846
8. *Membracis triangulum* Germar, 1821, **NEW COMBINATION: *Ochropepla triangulum*** (Germar, 1821)

Four species (*Ochropepla carinata* Funkhouser, 1822; *Ochropepla dubia* Fowler, 1897; *Ochropepla fuscata* Fowler, 1897; *Hoplophora gloveri* Goding, 1893) most recently placed in *Hoplophorion* (Metcalf and Wade 1965) belong to neither *Metcalfiella* nor *Ochropepla* and must be referred to other genera (see McKamey 1989).

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